

## Claims

1. A polarizer to improve contrast for LCD from down view angle is produced by laminating a triacetate cellulose (TAC) sheet on each side of a polyvinyl alcohol (PVA) sheet and further on the toppest triacetate cellulose( TAC )sheet  
5 applying a surface-treatment layer that is a protective film formed by black dye mixture to inhibit dark-state light leakage and improve the contrast for LCD from down view angle.
2. As described in Claim 1 for a polarizer to improve the contrast from down view angle, the black dye is a solvent dye.
- 10 3. As described in Claim 1 for a polarizer to improve the contrast from down view angle, the black dye is an ionic acid chromic metal complex dye.
4. As described in Claim 1 for a polarizer to improve the contrast from down view angle, the black dye is mixed with the surface treatment material in 0.001% ~ 1% by weight.
- 15 5. As described in Claim 1 for a polarizer to improve the contrast from down view angle, the surface treatment layer is a hardcoat layer (HC layer).
6. As described in Claim 1 for a polarizer to improve the contrast from down view angle, the surface treatment layer is an anti-static layer (AS layer).